COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A material useful as a substrate for preparing articles, comprising:

a compressed sheet of graphite having at least one graphite intercalation compound included therein, the at least one graphite intercalation compound being present at a level effective to provide improved thermal or electrical properties as compared with a compressed sheet of graphite not having the at least one graphite intercalation compound.

Claim 2 (previously presented) A material of claim 1 wherein the intercalation compounds are selected from the group consisting of halogens, mixed halogens, halides, oxidizing acids, alkali metals, transition metals and mixtures.

Claim 3 (original) A material of claim 1 which comprises at least 1% of one or more graphite intercalation compounds.

Claim 4 (original) A material of claim 1 which comprises from 3 to 20% by weight of a graphite intercalation compound.

Claim 5 (original) A material comprising at least one layer of a material of claim 1 and another layer of flexible graphite sheet.

Claim 6 (original) A material of claim 1 which has a density of from about 0.1 to about 1.5 grams/cm^3.

Claim 7 (original) A material of claim 1 which has a thickness of from 0.075 to 1.4 mm.

Claim 8 (original) A material of claim 1 which has an electrical conductivity within the range of from 1.0 to 7.6 x 10^7 $\Omega^{-1}m^{-1}$.

Claim 9 (original) A material of claim 1 which has a thermal conductivity within the range of 5 to 2000 W/m K.

Claim 10 (previously presented) A material of claim 1 which has an electrical resistivity of less than about 8 μ ohm-meter.

Claim 11 (original) A material of claim 1 wherein the sheet contains resin at a level of at least about 5% in the flexible graphite sheet.

Claim 12 (previously presented) A process for preparing a material useful as a substrate for preparing articles comprising:
intercalating a sheet of compressed particles of exfoliated graphite to form graphite intercalation compounds which increase the thermal and/or electrical conductivity of the graphite sheet; and compressing the sheet following intercalation.

Claim 13 (previously presented) A process of claim 12 wherein the intercalation compounds comprised are selected from the group consisting of halogens, mixed halogens, halides, oxidizing acids, alkali metals, transition metals and mixtures.

Claim 14 (original) A process of claim 12 wherein the sheet following intercalation comprises at least 1% of one of more graphite intercalation compounds.

Claim 15 (original) A process of claim 12 wherein the sheet following intercalation comprises from 3 to 20% by weight of a graphite intercalation compound.

Claim 16 (previously presented) A process of claim 12 wherein at least one layer of a compressed sheet of graphite having graphite intercalation compounds included therein is compressed with another layer of flexible graphite sheet.

Claim 17 (previously presented) A process of claim 12 wherein the compressed sheet has a density of from about 0.1 to about 1.5 grams/cm^3.

Claim 18 (previously presented) A process of claim 12 wherein the compressed sheet has a thickness of from 0.075 to 1.4 mm.

Claim 19 (previously presented) A material of claim 12 wherein the compressed sheet has an electrical conductivity within the range of from 1.0 to 7.6 x 10^7 Ω^{-1} m^{-1}.

Claim 20 (previously presented) A process of claim 12 wherein the compressed sheet has a thermal conductivity within the range of 5 to 2000 W/m K.

Claim 21 (original) A process of claim 12 wherein the sheet contains resin at a level of at least about 5% in the flexible graphite sheet.

Claim 22 (previously presented) A material of claim 12 wherein the compressed sheet has an electrical resistivity of less than about 8 μ ohm-meter.